What is claimed is:

1. A data sending system, comprising:

a network having a control path and a data path;

a control unit for instructing data sending through said control path;

one or a plurality of data sending units sending data to a specific path among a plurality of logical paths of said data path, by an instruction from said control unit; and

a data receiving unit permanently connected to said specific path among the plurality of logical paths of said data path;

wherein, said control unit has a determining section for determining a time span during which no sending data exist in the logical path connected to said data receiving unit, and for instructing one of said data sending unit to send a dummy data during the time span,

and said data sending unit has a dummy data sending section for sending the dummy data, to which appropriate parity information is added, by said instruction.

2. The system claimed in claim 1, further comprising:

said control unit having an identification request section for requesting said one or a plurality of data sending units to identify data sending status; and

said data sending unit having a status report section for reporting, according to said identification request, a data sending status of said data sending unit to the control unit;

wherein, the determining section of said control unit determines, according to a content of said information, the time span during which no sending data exists in the logical path connected to said data receiving unit.

3. The system claimed in claim 2, wherein the determining section of said control unit further includes a scheduling section for specifying the data sending unit, which performs said dummy data sending according to a predetermined order or an algorithm.

4. The data sending system, comprising:

a network consisting of the controlling path and data path;

a plurality of data sending units which communicate each other through said control path and send the data to a specific path among plurality of the logical paths of said data path; and

the data receiving unit permanently connected to a specific path among the plurality of logical paths of said data path;

wherein, said data receiving unit comprises;

an identification request/status report section for performing a process of identification request and report of data sending status in each data sending unit by communication through said control path;

a determining section for determining, according to said identification request and report, the time span during which no sending data exist in the logical path connected to the data receiving unit:

a scheduling section for performing a process of dummy data sending scheduling during the time span; and

a dummy data sending section for sending the dummy data, to which the appropriate parity information is added, according to said scheduling.

5. The system claimed in claim 4, wherein said data sending unit further has a failure watch section for watching a failure in said control path, said data sending unit separating itself from said control path on detecting the failure.

6. The system claimed in claim 4, in which the

data sending unit, selected according to a predetermined order and an algorithm as a master unit, determines the time span by said determining section, and sends the dummy data by said dummy data sending section; and wherein, another data sending unit, working as a slave unit, sends the dummy data by said dummy data sending section according to an instruction from said master unit.

7. The data sending system, comprising:

the network including data path;

one or plurality of data sending units for sending the data to a specific path among the plurality of logical paths of said data path; and

the data receiving path permanently connected to the one among the plurality of logical paths of said data path;

wherein, said data sending unit comprising;

the scheduling section for performing the scheduling process of the predetermined time span, during which no sending data exist in the logical path connected to said receiving unit; and

the dummy data sending section for sending the dummy data to which the appropriate parity information is added.

8. A data sending method for a ring-shaped network having one or plurality of data sending units, to which the data receiving unit for receiving the data from said data sending unit is connected; wherein, at least one of said data sending unit sends the dummy data, to which the appropriate parity information is added, to said data receiving unit, during the time span in which no data to be sent, to said data receiving unit, exists.